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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,692	07/09/2008	Dan Neumayer	2004P00099WOUS	8188

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BSH HOME APPLIANCES CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
100 BOSCH BOULEVARD
NEW BERN, NC 28562

EXAMINER

DANG, KET D

ART UNIT	PAPER NUMBER
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3742

NOTIFICATION DATE	DELIVERY MODE
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06/27/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

NBN-IntelProp@bshg.com

Office Action Summary	Application No.	Applicant(s)	
	10/586,692	NEUMAYER ET AL.	
	Examiner	Art Unit	
	KET D. DANG	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10-2004-003-119.3.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/19/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on January 12, 2004. It is noted, however, that applicant has not filed a certified copy of the foreign priority application as required by 35 U.S.C. 119(b).

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

- (l) **SEQUENCE LISTING** (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art

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known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international

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application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

2. The disclosure is objected to because of the informalities: the specification does not include proper headings as set forth above. Correction is required. See MPEP § 608.01(b). The paragraphs [0001], [0007] should be deleted because the technical aspect of the invention should be clearly described and shall not refer to the claim. The entire page 10 should be removed.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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3. The abstract of the disclosure is objected to because the use of legal phraseology such as said, means, comprising, and relates to should be avoided.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 20-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 20, limitation "the insulating casting means" recited at lines 6-7, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "the insulating casting means" and "a casting means" at line 6 and to whether they are the same or different. Further clarification is required to either further differentiate (the insulating casting means) or provide proper antecedent basis

In claim 21, the preamble is unclear and confused. It is suggested to be read as "A device for heating food by induction heating comprising". Similarly, as for the same reason set forth in claim 20 above, there is no antecedent basis for "the insulating casting means" recited at lines 6-7 in the claim.

Claim 24 is indefinite as for the same reason set forth in claim 21 above. It is suggested that the preamble need to be rewrite.

In claim 33, the term "especially" should be deleted.

It is noted that the use of phrases such as "substantially corresponding to" and "substantially corresponds to" in claims 20, 21, 22, 23, 24 renders the claim indefinite because the term "substantially" is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear how much would be considered substantially correspond(ing)s.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 20 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (US 6281611 B1).

Chen et al. discloses a device in which food can be heated by means of inductive coupling, comprising: a winding body 29 (fig. 2, i.e. the base portion of the container (30)); at least one secondary winding 137 (fig. 2) formed from a current conductor to which at least one heating element (see figure 2) is connected (col. 5, lines 23-29); a casting means that mounts the secondary winding 137 (fig. 2) in the winding body and the insulating casting means having a coefficient of thermal expansion substantially

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corresponding to that of the winding body (col. 2, lines 46-50; col.8, lines 22-29; NOTE: a coefficient of thermal expansion is not patentable because of inherent property of any insulating materials unless it is specifically pointed out what is it).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 20, 22-23, 25-27, 28-29, 33, 35, and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 6281611 B1) in view Abbott et al. (US Pub. No. 20010003336 A1).

10. Regarding claims 20, 22-23, 27, and 37, Chen et al. discloses a device in which food can be heated by means of inductive coupling, comprising: a winding body 29 (fig. 2, i.e. the base portion of the container (30)); at least one secondary winding 137 (fig. 2) formed from a current conductor to which at least one heating element (see figure 2) is connected (col. 5, lines 23-29); a casting means that mounts the secondary winding 137 (fig. 2) in the winding body and the insulating casting means (col. 2, lines 46-50; col.8, lines 22-29).

With respect to claim 25, Chen et al. discloses wherein the winding body a winding body 29 (fig. 2, i.e. the base portion of the container (30)) consists of ferrite (col. 2, lines 16-17).

With respect to claim 26, Chen et al. discloses the winding body for a temperature range of 20°C to 150°C (col. 1, lines 32-33).

With respect to claim 28, Chen et al. discloses wherein the winding body is rotationally symmetrical (as seen in figure 2, i.e. the container (30) can be rotated symmetrical to align with the permanent magnet (42)).

With respect to claim 35, Chen et al. discloses thermal insulation col.8, lines 22-29) disposed between the secondary winding 137 (fig. 2) and the heating element (as seen in figure 2).

Chen et al. discloses all of the limitations of the claimed invention as set forth above, except for a coefficient of thermal expansion substantially corresponding to that of the winding body.

However, a coefficient of thermal expansion substantially corresponding to that of the winding body is known in the art. Abbott et al., for example, teaches a coefficient of thermal expansion that is match with the insulating component or layer (para. 0044, lines 6-8; para. 0045). Abbott et al also teaches small thickness insulating layer (para. 0051).

With respect to claim 29, Abbott et al. teaches wherein the protective layer has a high material hardness (para. 0010).

With respect to claim 33, Abbott et al. teaches wherein the casting means comprises filler especially made of ceramic (para. 0044, 0046).

With respect to claim 38, Abbott et al. teaches wherein the protective layer consists of ceramic (para. 0051).

Abbott et al. further teaches such a configuration provides greater latitude in heater design and greater control over the amount of heat generated (para. 0012). It would have been obvious to one of ordinary skill in the art to modify Chen et al. with a coefficient of thermal expansion substantially corresponding to that of the winding body of Abbott et al. in order to provide greater latitude in heater design and greater control over the amount of heat generated.

11. Claims 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornec et al. (US 5866884) in view of Abbott et al. (US Pub. No. 20010003336 A1).

Regarding claims 21 and 24, Cornec et al. discloses a device for transferring energy into a device for heating food by means of induction (see figure 1) comprising: a primary winding 1 (fig. 1) formed from a current conductor and connectable to a voltage source; a winding body 4 (fig. 1, i.e. coil support); and a casting means 2/2a (fig. 1) or 6/7 (fig. 2) that mounts the primary winding in the winding body 4 (fig. 1, i.e. coil support and the insulating casting means (col. 3, lines 19-47); and a protective layer thickness col. 4, lines 22-35).

Cornec et al. discloses all of the limitations of the claimed invention as set forth above, except for a voltage source; and a coefficient of thermal expansion substantially corresponding to that of the winding body.

However, a voltage source; and a coefficient of thermal expansion substantially corresponding to that of the winding body is known in the art. Abbott et al., for example,

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teaches a voltage source (para. 0006, 0008); and a coefficient of thermal expansion substantially corresponding to that of the winding body (para. 0044, lines 6-8; para. 0045). Abbott et al also teaches small thickness insulating layer (para. 0051). Abbott et al. further teaches such a configuration provides greater latitude in heater design and greater control over the amount of heat generated (para. 0012). It would have been obvious to one of ordinary skill in the art to modify Cornec et al. with a coefficient of thermal expansion substantially corresponding to that of the winding body of Abbott et al. in order to provide greater latitude in heater design and greater control over the amount of heat generated.

12. Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 6281611 B1) in view Abbott et al. (US Pub. No. 20010003336 A1) as applied to claims 20, 22-23, 25-27, 28-29, 33, 35, and 37-38 above, and further in view of Wittdorf et al. (US 6478843 B1).

Chen et al. in view Abbott et al. discloses all of the limitations as set forth above, except for wherein the protective layer is an amorphous hydrocarbon layer and having a thickness of 500 micrometers.

However, wherein the protective layer is an amorphous hydrocarbon layer and having a thickness of 500 micrometers is known in the art. Wittdorf et al., for example, teaches wherein the protective layer is an amorphous hydrocarbon layer (col. 2, line 64) and having a thickness (col. 3, line 44). It is known in the art such a configuration provides a means to protect the surface. It would have been obvious to one of ordinary

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skill in the art to modify Chen et al. in view Abbott et al. with the features above of Wittdorf et al. in order to provide a means to protect the surface.

13. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 6281611 B1) in view Abbott et al. (US Pub. No. 20010003336 A1) as applied to claims 20, 22-23, 25-27, 28-29, 33, 35, and 37-38 above, and further in view of Simeray et al. (US 6291805 B1).

Chen et al. in view Abbott et al. discloses all of the limitations as set forth above, except for wherein the casting means comprises epoxy resin.

However, wherein the casting means comprises epoxy resin is known in the art. Simeray et al., for example, teaches epoxy resin layer (col. 6, lines 43). Simeray et al. further teaches such a configuration provides a mobile heating device which allows, with simple means, to heat or to maintain at temperature a plate or a dish without risk of burns, without complicated manipulation, especially without having to undertake a connection, and without flame or electrical voltage which could be harmful (col. 2, lines 8-14). It would have been obvious to one of ordinary skill in the art to modify Chen et al. in view Abbott et al. with wherein the casting means comprises epoxy resin of Simeray et al. in order to provide a mobile heating device which allows, with simple means, to heat or to maintain at temperature a plate or a dish without risk of burns, without complicated manipulation, especially without having to undertake a connection, and without flame or electrical voltage which could be harmful.

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14. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 6281611 B1) in view Abbott et al. (US Pub. No. 20010003336 A1) as applied to claims 20, 22-23, 25-27, 28-29, 33, 35, and 37-38 above, and further in view of Gross et al. (US 5893996).

Chen et al. in view Abbott et al. discloses all of the limitations as set forth above, except for wherein the heating element comprises at least one heating conductor having a meander-shaped.

However, wherein the heating element comprises at least one heating conductor having a meander-shaped is known in the art. Gross et al., for example, teaches heating conductor having a meander-shaped (see figure 2, col. 4, lines 14-18). Gross et al. further teaches such a configuration provides uniform coverage of the heating area (col. 4, lines 10-11). It would have been obvious to one of ordinary skill in the art to modify Chen et al. in view Abbott et al. with wherein the heating element comprises at least one heating conductor having a meander-shaped of Gross et al. in order to provide uniform coverage of the heating area.

15. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 6281611 B1) in view Abbott et al. (US Pub. No. 20010003336 A1) as applied to claims 20, 22-23, 25-27, 28-29, 33, 35, and 37-38 above, and further in view of Kicherer et al. (US 5900175).

Chen et al. in view Abbott et al. discloses all of the limitations as set forth above, except for wherein the thermal insulation comprises vermiculite.

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However, wherein the thermal insulation comprises vermiculite is known in the art. Kicherer et al., for example, teaches wherein the thermal insulation comprises vermiculite (col. 2, line 6; col. 6, line 55). Kicherer et al. further teaches such a configuration provides a good electrical insulator and temperature resistance properties (col. 6, lines 58-60). It would have been obvious to one of ordinary skill in the art to modify Chen et al. in view Abbott et al. with wherein the thermal insulation comprises vermiculite of Kicherer et al. in order to provide a good electrical insulator and temperature resistance properties.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET D. DANG whose telephone number is (571)270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KET D. DANG/
Examiner, Art Unit 3742
June 13, 2011

/Henry Yuen/
Supervisory Patent Examiner, Art
Unit 3700